SPECIFICATION AMENDMENTS:

Please amend the specification as indicated:

Please amend paragraph [1029] as follows:

[1029] Additionally, devices communicate to each other according to higher-level protocols. For example, end-user computer 304 and Internet site 334 communicate together as follows: First, an application on end-user computer 304 sends data down through the OSI layers from layer 7 to layer 1, which is [[the]] then sent through an Ethernet connection to the DSL Router. The Router has a layer 1/2/3 connection up and running from itself to the BRAS. The router puts up a PPPoE connection from Layer 2, and when a PC or other device sends data to the router, it works as a relay agent to sent/receive data over the DSL/PPPoE link (e.g. PC→ Router→DSLAM→ATM→BRAS→Internet).

Please amend paragraph [1036] as follows:

[1036] FIG. 4. illustrates a flow diagram for trouble-shooting a DSL connection according to an embodiment of the present invention. An upper-layer status is determined from a remote location, at step 402. For example, an access provider technician can inquire, from a remote location, a status of an upper-layer indicator displayed at a CPE transceiver coupled to an end-user computer. A technician, after receiving a trouble call from an end-user, can ask the end-user the visual status of the upper-layer indicator. Next, the status is entered into data storage, at step 404. For example, a technician can enter the status of the upper-layer indicator into an electronic job ticket that documents the trouble request [[form]] from the user, such as a DSL subscriber. A determination is made whether the upper-layer status indicates valid or invalid communication, at step 406. A first set of actions is performed if the status indicates valid communication, at step 408. For example, a technician can be dispatched to the end-user location to perform a defined set of trouble shooting actions. Alternatively or additionally, a technician can be assigned a list of activities to be performed at the service provider's location, for example, determining operational status of service provider equipment. A second set of actions is performed if the status indicates invalid communication, at step 410. For example, a

service technician receiving the trouble call from the end-user can aid the user in the set up of his DSL transceiver to achieve communication, for example, proper PPPoE authentication.

Please amend paragraph [1037] as follows:

[1037] FIG. 5 illustrates a view of a transceiver 500 according to an embodiment of the present invention. As illustrated, transceiver 500 includes power LED 502, Ethernet LED 504, DSL LED 506, Activity LED 508, and PPPoE LED 510. PPPoE software runs on router operating system (OS) software and sends requests to the router OS to turn on [[light]] the LED light when detecting the condition of PPPoE authentication.